

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/789,547	02/26/2004	Michel Sayag	SAY1P004D1	9483	
22434 7	7590 06/08/2006		EXAM	EXAMINER	
BEYER WEAVER & THOMAS LLP			LEE, SI	LEE, SHUN K	
P.O. BOX 70250 OAKLAND, CA 94612-0250			ART UNIT	PAPER NUMBER	
			2884		
			DATE MAILED: 06/08/200	DATE MAILED: 06/08/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.



Commissioner for Patents United States Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450

# BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

MAILED
JUN 9 2006

Application Number: 10/789,547 Filing Date: February 26, 2004 Appellant(s): SAYAG, MICHEL

GROUP 2800

Joseph M. Villeneuve For Appellant

**EXAMINER'S ANSWER** 

This is in response to the appeal brief filed 6 April 2006 appealing from the Office action mailed 11 July 2005.

#### (1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

#### (2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

#### (3) Status of Claims

The statement of the status of claims contained in the brief is incorrect. A correct statement of the status of the claims is as follows:

This appeal involves claims 1, 9, 11, 12, and 16-20.

#### (4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

### (5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

# (6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is substantially correct. The changes are as follows:

<u>Issue I:</u> Whether claims 1, 9, 11, 12, and 20 are unpatentable under 35 U.S.C. 103(a) over Mueller et al. (WO 99/28765 with corresponding US 6,373,074) in view of Alvarez (US 5,221,843) and the third edition (1997-02) of IEC 60406. It is

Art Unit: 2884

noted that appellant has expressly identify claim 1 of Issue I as being argued separately and that claims 9, 11, 12, and 20 stand or fall with claim 1.

Issue II: Whether claims 16-19 are unpatentable under 35 U.S.C. 103(a) over Mueller et al. (WO 99/28765 with corresponding US 6,373,074) in view of Alvarez (US 5,221,843) and the third edition (1997-02) of IEC 60406 as applied to claim 1 above, and further in view of Karellas (US 5,864,146). It is noted that appellant has expressly identify claims 18 and 19 of Issue II as being argued separately.

#### **GROUNDS OF REJECTION NOT ON REVIEW**

The following grounds of rejection have not been withdrawn by the examiner, but they are not under review on appeal because they have not been presented for review in the appellant's brief.

Issue III: Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mueller et al. (WO 99/28765 with corresponding US 6,373,074) in view of Alvarez (US 5,221,843) and the third edition (1997-02) of IEC 60406 as applied to claim 1 above, and further in view of Floresta et al. (US 6,239,516) and Budinski et al. (US 5,912,944).

Issue IV: Claims 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mueller et al. (WO 99/28765 with corresponding US 6,373,074) in view of Alvarez (US 5,221,843) and the third edition (1997-02) of IEC 60406 as applied to claim 1 above, and further in view of Dewaele (US 5,757,021).

Art Unit: 2884

Issue V: Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mueller et al. (WO 99/28765 with corresponding US 6,373,074) in view of Alvarez (US 5,221,843) and the third edition (1997-02) of IEC 60406 as applied to claim 20 above, and further in view of Floresta et al. (US 6,239,516).

Issue VI: Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mueller et al. (WO 99/28765 with corresponding US 6,373,074) in view of Alvarez (US 5,221,843) and the third edition (1997-02) of IEC 60406 as applied to claim 1 above, and further in view of Appellant's Admitted Prior Art.

#### (7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

## (8) Evidence Relied Upon

5,221,843	ALVAREZ	6-1993
5,757,021	DEWAELE	5-1998
5,864,146	KARELLAS	1-1999
5,912,944	BUDINSKI et al.	6-1999
6,239,516	FLOREȘTA et al.	5-2001
6,373,074	MUELLER et al.	4-2002
WO 99/28765 A1	MÜLLER et al.	6-1999

Cassettes for medical X-ray diagnosis - Radiographic cassettes and mammographic cassettes, 3<sup>rd</sup> Edition (1997-02) of IEC 60406, (1997), pp. 1-37.

#### (9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

US 6,373,074) in view of Alvarez (US 5,221,843) and the third edition (1997-02) of IEC 60406.

In regard to claim **1**, Mueller *et al.* disclose (Figs. 1 and 7) an integrated x-ray image capture and readout system, comprising:

- (a) a cassette enclosure (70) having a form factor;
- (b) a storage-phosphor plate (15) operable to capture incident x-rays corresponding to an image;
- (c) a stimulating light source (11) operable to expose a surface of the storagephosphor plate (15) to stimulating light;
- (d) an array of detectors (12) positioned to receive stimulated light via the surface of the storage-phosphor plate (15), the stimulated light being released from the storage-phosphor plate (15) in response to the stimulating light; and
- (e) an actuator assembly (71, 72, 73) operable to effect relative motion between the surface of the storage-phosphor plate (15) and each of the stimulating light source (11) and the array of detectors (12) in one dimension (A);
- wherein the storage-phosphor plate (15), the stimulating light source (11), the array of detectors (12), and the actuator assembly (71, 72, 73) are enclosed in the cassette enclosure (70).

Art Unit: 2884

The system of Mueller et al. lacks an explicit description that the cassette enclosure form factor corresponding to a standard radiographic film cassettes, the form factor corresponding to a thickness of the cassette enclosure of about 0.6 inches (i.e., ~15 mm). However, Mueller et al. also disclose (US 6,373,074 column 10, lines 55-57) that the x-ray cassette can be manufactured with very small dimensions such as a 45 mm x-ray cassette insertable in conventional x-ray units already in operation. Further, conventional x-ray units already in operation are well known in the art. For example, Alvarez teach (column 2, lines 32-40) that nearly all medical equipment is designed for film cassettes (i.e., standard radiographic film cassettes) and that compatibility with these film cassette holder is highly desirable. Further, the third edition (1997-02) of IEC 60406 provides example of radiographic film cassette thickness of 15 mm, 16.5 mm, and 20.5 mm. Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to provide a cassette enclosure form factor in the system of Mueller et al. corresponding to a standard radiographic film cassette form factor (e.g., ~15 mm thick), in order that the system is insertable in

In regard to claim **9** which is dependent on claim 1, Mueller *et al.* also disclose (Figs. 1 and 7) that the actuator assembly (71, 72, 73) is disposed along an edge of the cassette enclosure (70) to maximize an imaging area of the storage-phosphor plate (15).

conventional x-ray units already in operation.

In regard to claim 11 which is dependent on claim 1, Mueller et al. also disclose (Figs. 1 and 7) that the actuator assembly (71, 72, 73) comprises a magnetic linear

Art Unit: 2884

motor (*i.e.*, comprising guide bars 71, 72 as reaction components for linear motor 73; US 6,373,074 column 10, lines 29-39).

In regard to claim **12** which is dependent on claim 1, Mueller *et al.* also disclose (Figs. 1 and 7) that the array of detectors (12) is operable to convert the stimulated light to electronic data corresponding to the image, the system further comprising a transmission medium (*i.e.*, interface ports; US 6,373,074 column 10, lines 49-51) for transmitting the electronic data out of the cassette enclosure (70).

In regard to claim **20** which is dependent on claim 1, Mueller *et al.* also disclose (Figs. 1 and 7) that the actuator assembly (71, 72, 73) comprises a magnetic linear motor (*i.e.*, comprising guide bars 71, 72 as reaction components for linear motor 73; US 6,373,074 column 10, lines 29-39) and the stimulating light source (11) and the array of detectors (12) are configured on a translation stage (10).

Issue II: Claims 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mueller et al. (WO 99/28765 with corresponding US 6,373,074) in view of Alvarez (US 5,221,843) and the third edition (1997-02) of IEC 60406 as applied to claim 1 above, and further in view of Karellas (US 5,864,146).

In regard to claims **16-19** which are dependent on claim 1, the system of Mueller *et al.* lacks an image capture detection circuitry comprising an x-ray detector (*e.g.*, a photodiode for detection prompt emission of the storage-phosphor plate) for detecting some of the incident x-rays and generating a signal indicative whether capture of the incident x-rays is occurring, and that the signal is employed to control actuation of the actuator assembly. Karellas teaches (column 36, line 60 to column 37, line 21) to

Art Unit: 2884

detect prompt emission from a storage-phosphor plate in order to assess the level of x-ray exposure in order to adjust the reading of the storage-phosphor plate. Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to provide an image capture detection circuitry comprising an x-ray detector (e.g., a photodiode for detection prompt emission of the storage-phosphor plate) in the system of Mueller et al., in order to obtain a signal which is used to adjust the storage-phosphor plate reading (e.g., by controlling the actuation of the actuator assembly).

The following grounds of rejection (issues III-VI) have not been withdrawn by the examiner, but they are not under review on appeal because they have not been presented for review in the appellant's brief:

Issue III: Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over

Mueller et al. (WO 99/28765 with corresponding US 6,373,074) in view of

Alvarez (US 5,221,843) and the third edition (1997-02) of IEC 60406 as

applied to claim 1 above, and further in view of Floresta et al. (US 6,239,516)

and Budinski et al. (US 5,912,944).

In regard to claim **10** which is dependent on claim 1, while Mueller *et al.* also disclose (Figs. 1 and 7; US 6,373,074 column 10, lines 29-39) that the actuator assembly (71, 72, 73) comprises guide bars 71, 72 as reaction components for linear motor 73, the system of Mueller *et al.* lacks that at least a portion of the actuator assembly comprises a radiolucent material. However, linear motors are well known in the art. For example, Floresta *et al.* teach (column 2, line 47 to column 3, line 27) that a

Art Unit: 2884

linear motor comprising resin epoxy have a number of advantageous such as enhanced performance. Further, Budinski *et al.* teach (column 3, line 63 to column 4, line 2) that cassettes are formed from epoxy since epoxy have very small x-ray attenuation. Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to form the actuator assembly in the system of Mueller *et al.* with resin epoxy (which is inherently a radiolucent material), in order to obtain an enhanced linear motor performance.

Issue IV: Claims 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mueller et al. (WO 99/28765 with corresponding US 6,373,074) in view of Alvarez (US 5,221,843) and the third edition (1997-02) of IEC 60406 as applied to claim 1 above, and further in view of Dewaele (US 5,757,021).

In regard to claims 13-15 which are dependent on claim 1, the system of Mueller et al. lacks a radio frequency detector for detecting radio frequency energy in close proximity to the cassette enclosure, the radio frequency energy corresponding to patient information to be associated with the image, and a radio frequency transmitter included in one of a wrist band and a badge disposed outside of the cassette enclosure for generating the radio frequency energy. Dewaele teach (column 9, lines 20-63) a radio frequency detector for detecting radio frequency energy in close proximity to the cassette enclosure (i.e., radio frequency tags on storage-phosphor cassettes), the radio frequency energy corresponding to patient information to be associated with the image (i.e., radio frequency tags in one of a hospital bracelet or an identification card; column 11, lines 35-37), in order to associate the radiographic image with a patient (column 1,

Art Unit: 2884

lines 37-38). Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to provide a hospital bracelet in the system of Mueller *et al.* for transmitting radio frequency energy (*i.e.*, patient information) to a radio frequency tag on the cassette, in order to associate the radiographic image with a patient.

Issue V: Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mueller et al. (WO 99/28765 with corresponding US 6,373,074) in view of Alvarez (US 5,221,843) and the third edition (1997-02) of IEC 60406 as applied to claim 20 above, and further in view of Floresta et al. (US 6,239,516).

In regard to claim **21** which is dependent on claim 20, while Mueller *et al.* also disclose (Figs. 1 and 7) that the magnetic linear motor (*i.e.*, comprising guide bars 71, 72 as reaction components for linear motor 73; US 6,373,074 column 10, lines 29-39) comprises at least one guide bar (71, 72) disposed inside and along an edge of the cassette enclosure (70), and a linear motor actuator (73) coupled to the translation stage (10), the system of Mueller *et al.* lacks an explicit description that the guide bars (71, 72) comprise magnets. However, linear motors are well known in the art. For example, Floresta *et al.* teach (column 1, lines 7-63) it is known in the art that guide bars as reaction components for a linear motor comprise magnets. Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention that the reaction components in the system of Mueller *et al.* comprise of magnets as is well known in the art.

Application/Control Number: 10/789,547 Page 11

Art Unit: 2884

Issue VI: Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mueller et al. (WO 99/28765 with corresponding US 6,373,074) in view of Alvarez (US 5,221,843) and the third edition (1997-02) of IEC 60406 as applied to claim 1 above, and further in view of Appellant's Admitted Prior Art.

In regard to claim 22 which is dependent on claim 1, the system of Mueller *et al.* lacks that standard radiographic film cassette form factors have a set of dimensions corresponding to one of 14" X 17", 14" X 14", 10" X 12", 8" X 10", 35 cm X 43 cm, 35 cm X 35 cm, 20 cm X 40 cm, 18 cm X 43 cm, 13 cm X 18 cm, 13 cm X 30 cm, 18 cm X 24 cm, and 24 cm X 30 cm. Appellant admits (last paragraph on pg. 19) as Prior Art that standard radiographic film cassette form factors have a set of dimensions corresponding to one of 14" X 17", 14" X 14", 10" X 12", 8" X 10", 35 cm X 43 cm, 35 cm X 35 cm, 20 cm X 40 cm, 18 cm X 43 cm, 13 cm X 18 cm, 13 cm X 30 cm, 18 cm X 24 cm, and 24 cm X 30 cm. Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to provide a cassette enclosure form factor in the system of Mueller *et al.* corresponding to a known standard radiographic film cassette form factor (*e.g.*, 35 cm X 35 cm), in order that the system is insertable in conventional x-ray units already in operation.

Application/Control Number: 10/789,547 Page 12

Art Unit: 2884

#### (10) Response to Argument

<u>Issue I:</u>

Claim 1 (section 1 arguments on pg. 5-8 of appeal brief filed 6 April 2006):

Appellant argues that the receiving means of Mueller *et al.* is CCD 12 in combination with Selfoc lens assembly 14 which focuses the excitation radiation on the individual elements of the CCD. Examiner respectfully disagrees. Mueller *et al.* state (US 6,373,074 column 3, lines 38-42) that "A reproduction device can be provided between the phosphor carrier and the receiving device, which can be used to reproduce the secondary radiation emitted by the individual stimulated points of the phosphor carrier at the individual point elements of the receiving device". The key phrase is "can be provided". It is important to recognize that "can" denotes possibility and clearly does not indicate a requirement. In addition, claim 6 recites a device "further comprising reproduction means". Therefore, Mueller *et al.* expressly teach that a reproduction device (*e.g.*, Selfoc lens assembly 14) is optional.

Appellant also argues that it is notable that Mueller *et al.* state that "[i]t is possible to limit the thickness of the x-ray cassette to about 45 mm". It is important to consider this sentence fragment within the context of Mueller *et al.*'s disclosure. Mueller *et al.* state (US 6,373,074 column 10, lines 52-57) that "Due to the design subject to the invention of the device for reading out information stored in a phosphor carrier, the x-ray cassette can be manufactured with very small dimensions. It is possible to limit the thickness of the x-ray cassette to about 45 mm such that it can even be insertable in conventional x-ray units already in operation". The key phrase is "such that it can even

Art Unit: 2884

be". Thus in order to perform act B (*i.e.*, insert the x-ray cassette into conventional x-ray units already in operation), Mueller *et al.* teach an act A (*i.e.*, to limit the thickness of the x-ray cassette to about 45 mm). Therefore, this is merely an example of the very small dimensions of the x-ray cassette (when it is desirable to insert the x-ray cassette into conventional x-ray units already in operation) and is not an express teaching of a lower limit of ~45 mm.

Appellant argues that it would be apparent to those of skill in the art that the "cassette" to which Mueller et al. refers is more commonly referred to as a "Bucky", which is a term used in the industry for the cassette tray (invented by Bucky) into which film cassettes are inserted. Examiner respectfully disagrees. First it is noted that appellant does not point to any teaching within Mueller et al. which expressly discloses that the cassette of Mueller et al. is a "Bucky". Mueller et al. would be considered to have at least ordinary skill in the art, however it is significant that "Bucky" was not used within the disclosure of Mueller et al. Further, "Bucky" requires a reciprocating grid which is translated in a reciprocating motion by a motor (e.g., see remarks filed 14 January 2005). It is important to recognize that this reciprocating grid occupies physical space (i.e., the reciprocating grid has a thickness G that greater than zero) and that there is no disclosure or even a suggestion that space is provided within the cassette of Mueller et al. for a reciprocating grid. Thus, the cassette of Mueller et al. clearly does not include a reciprocating grid. Therefore, it would not be apparent to those of skill in the art (e.g., Mueller et al.) that the cassette of Mueller et al. is a "Bucky".

Appellant argues that Mueller et al. clearly describes an enclosure which can be integrated directly in an x-ray unit, signifying an enclosure which can be inserted in the x-ray table, not in the cassette tray of the table's bucky since Mueller et al.'s enclosure can fit in the x-ray table as a replacement for the bucky but clearly cannot fit in the cassette tray because of its size. Examiner respectfully disagrees. While appellant argues that the enclosure of Mueller et al. can fit in the x-ray table as a replacement for the bucky, appellant fails to explain where the required reciprocating grid would be physically located. Moreover, this argument implicitly depends on an assumption that Mueller et al. has disclosed a lower limit. As discussed above, there is no express teaching of a lower limit in Mueller et al.

Appellant argues that the combination of Mueller *et al.*'s teachings with those of IEC 60406 is improper since the receiving means in Mueller *et al.*, *i.e.*, the CCD and its accompanying lens system, cannot be compressed below the stated limit due in large part to optical considerations. Examiner respectfully disagrees. As discussed above, Mueller *et al.* expressly teach that a reproduction device (*e.g.*, accompanying lens assembly 14) is optional.

Appellant argues that in describing a key advantage, Mueller *et al.* state that his technique makes it possible "to limit the thicknes's of the x-ray cassette to about 45 mm". Examiner respectfully disagrees. As discussed above, there is no express teaching of a lower limit in Mueller *et al.* when this sentence fragment considered within the context of Mueller *et al.*'s disclosure.

Appellant argues that Mueller *et al.* is not saying that some form of lens is not required, but that having an individual Selfoc lens for each stimulable point of the line of the phosphor plate is not required for the invention. Examiner respectfully disagrees.

As discussed above, Mueller *et al.* <u>expressly</u> teach that a reproduction device (*e.g.*, accompanying lens assembly 14) is <u>optional</u>.

Appellant argues that it would be apparent to one of ordinary skill in the art that Mueller *et al.*'s system would not work without some form of relay optics to focus the radiation from the plate on the CCD. Examiner respectfully disagrees. As discussed above, Mueller *et al.* (*i.e.*, one of ordinary skill in the art) <u>expressly</u> teach that a reproduction device (*e.g.*, accompanying lens assembly 14) is <u>optional</u>. Therefore, it would be apparent to one of ordinary skill in the art (*e.g.*, Mueller *et al.*) that Mueller *et al.*'s system <u>would work</u> without some form of relay optics to focus the radiation from the plate on the CCD.

Appellant argues that as shown in Fig. 1, the size of CCD assembly 12 and the requirement that it be placed at an angle and off to the side of laser diodes 11 (so as to be able to receive the emitted radiation) requires a minimum physical spacing which requires the use of an intervening optical relay and forces a minimum size on the assembly of Mueller *et al.* Examiner respectfully disagrees. First, Mueller *et al.* state (US 6,373,074 column 4, lines 25-27) that "FIG. 1 is a first exemplary embodiment of a device subject to the invention for reading out information stored in a phosphor carrier in the form of a reader head". Thus even if a minimum size can be estimated from Fig. 1, it would only apply to a first exemplary embodiment. Further, it is noted that Fig. 1 of

Mueller *et al.* does not include any dimensions. Assuming that the elements are drawn to scale, only relative dimensions of the elements can be obtained. Thus a minimum size on the assembly of Mueller *et al.* cannot be obtain from Fig. 1. In addition as discussed above, Mueller *et al.* expressly teaches that a reproduction device (*e.g.*, accompanying lens assembly 14) is optional.

Appellant argues that Mueller *et al.* would be inoperative without an intervening optical system. Examiner respectfully disagrees. As discussed above, Mueller *et al.* <u>expressly</u> teach that a reproduction device (*e.g.*, accompanying lens assembly 14) is optional.

Appellant argues that the inventor of the present invention has made it clear that one of ordinary skill in the art would understand that Mueller's system requires some form of intervening optical system to focus light on the CCD array and that, as a result, it could not be confined to a form factor as recited in the claims of the present application. Examiner respectfully disagrees. As discussed above, Mueller et al. expressly teach that a reproduction device (e.g., accompanying lens assembly 14) is optional. Therefore, one of ordinary skill in the art (e.g., Mueller et al.) would understand that Mueller et al.'s system does not require some form of intervening optical system to focus light on the CCD array and that, as a result, it can be confined to a form factor as recited in the claims of the present application.

Appellant argues that appellant has provided clear evidence that one of ordinary skill in the art would understand that Mueller et al.'s "cassette" is, in reality, a digital bucky. Examiner respectfully disagrees. The most significant fact is that "Bucky" was

not used within the disclosure of Mueller et al. It is noted that Mueller et al. expressly uses "X-ray cassette" in the disclosure (e.g., see claim 9). The evidence provided by appellant suggests that one of ordinary skill in the art can modify the X-ray cassette of Mueller et al. into a digital bucky. However, the evidence as a whole does not suggest that one of ordinary skill in the art (e.g., Mueller et al.) would understand that Mueller et al.'s "cassette" is, in reality, a digital bucky.

Appellant argues that the dependent claims 2-22 are believed to be allowable over the cited combination of references for at least the reasons discussed. Examiner respectfully disagrees for the reasons discussed above.

#### Issue II:

#### Claim 19 (section 2 arguments on pg. 8 of appeal brief filed 6 April 2006):

Appellant argues that Karellas makes no suggestion that the detection of x-ray energy may be used for actuation of an actuator assembly. In response to appellant's argument, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). In this case, Mueller *et al.* disclose (Figs. 1 and 7) an actuator assembly (71, 72, 73) operable to effect relative motion between the surface of the storage-phosphor plate (15) and each of the stimulating light source (11) and the array of detectors (12) in one dimension (A) for <u>reading</u> of the storage-phosphor plate

Art Unit: 2884

(15). Karellas teaches (column 36, line 60 to column 37, line 21) to detect prompt emission from a storage-phosphor plate in order to assess the level of x-ray exposure in order to adjust the <u>reading</u> of the storage-phosphor plate. Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to provide an image capture detection circuitry comprising an x-ray detector (e.g., a photodiode for detection prompt emission of the storage-phosphor plate) in the system of Mueller et al., in order to obtain a signal which is used to adjust the storage-phosphor plate reading process wherein the storage-phosphor plate reading process comprises actuation of the actuator assembly to start reading of the storage-phosphor plate.

#### Claim 18 (section 3 arguments on pg. 8 of appeal brief filed 6 April 2006):

Appellant argues that the use of an auxiliary device such as a photodiode is neither taught nor suggested since Karellas only mentions the use of its CCD to detect light corresponding to x-ray exposure time. In response to appellant's argument, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). In this case, Karellas teaches (column 36, line 60 to column 37, line 21) to detect prompt emission from a storage-phosphor plate in order to assess the level of x-ray exposure in order to adjust the reading of the storage-phosphor plate. Therefore it would have been obvious to one having ordinary skill in the art at the time of the

Application/Control Number: 10/789,547 Page 19

Art Unit: 2884

invention to provide a known detector (e.g., a photodiode) in the system of Mueller et al., in order to obtain a signal which is used to adjust the storage-phosphor plate reading process.

#### (11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

SL 31 May 2006

Conferees:

Shun Lee, Art Unit 2884

David Porta, SPE, Art Unit 2884

Ricky Mack, SPE, Art Unit 2878

DAVID PORTA

SUPERVISORY PATENT EXAMINER

TECHNOLOGY CENTER 2800

BEYER WEAVER & THOMAS, LLP P.O. BOX 70250

OAKLAND CA 94612-0250